

## BUREAU OF ENTERPRISE SYSTEMS AND TECHNOLOGY



### ENTERPRISE SERVICE DESCRIPTION FOR

### **Enterprise Data Integration**

*(Featuring the Pilotfish XCS eiPlatform)*

**September 2012**



## ABOUT DAS/BEST Services

The enterprise services offered by the Department of Administrative Services' (DAS) Bureau of Enterprise Systems and Technology (DAS/BEST) are designed to provide Executive Branch agencies with access to high quality and cost-effective technology services.

## CONFIDENTIALITY NOTICE

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## QUESTIONS ABOUT THIS SERVICE DESCRIPTION

This document was designed and developed by the Department of Administrative Services' Bureau of Enterprise Systems and Technology (DAS/BEST) to describe certain enterprise services offered by DAS/BEST to the Executive Branch agencies of the State of Connecticut. Should you have any questions or comments regarding this planning template, or desire to check to see if a more current version is available, please contact the **DAS/BEST Help Desk** by dialing **(860) 622-2300** or by electronic mail at [best.helpdesk@ct.gov](mailto:best.helpdesk@ct.gov).

## DOCUMENT HISTORY

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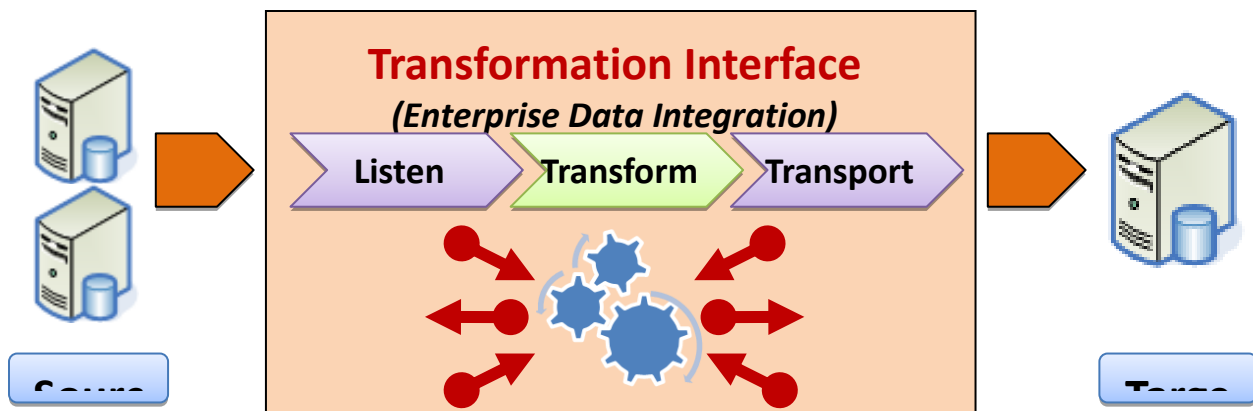
## I. Description of Services

DAS/BEST is pleased to offer Executive Branch state agencies with a powerful new **Enterprise Data Integration<sup>1</sup>Service** (the Service). Our Data Integration Service provides your agency with access to the tools, infrastructure, services and support that will allow you to rapidly respond to your agency's needs to transform and integrate data between disparate systems, regardless of a system's design or the type of data that your agency seeks to exchange.

To accomplish this, DAS/BEST has partnered with PilotFish Technology<sup>2</sup>, a Connecticut-based company who markets and supports their XCS eiPlatform, a powerful data transformation and delivery platform. This partnership allows DAS/BEST to offer this Enterprise Data Integration Service to state agencies for a fraction of what it would cost for your agency to develop these services on your own. In fact, there are some service scenarios that exist where an agency will not incur any cost for using the service.

## II. The Value of Data Integration Services

Much of the work of our state's business and information technology professionals focuses on the use and management of the state's data and information. From simple web sites to elaborate case management systems; from basic reports to complicated data warehouses, this data is the lifeblood state business and a significant state asset. The state's ability to easily and quickly move and share data throughout the enterprise is critical to the success of many state initiatives.



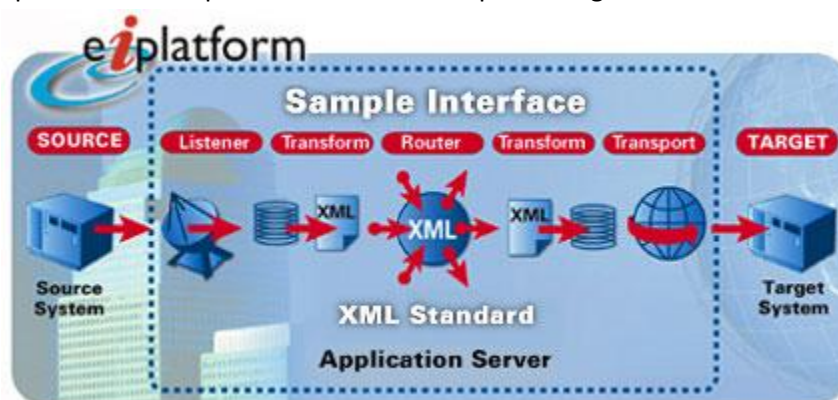
By using the Service, agencies are provided access to the tools, infrastructure and support that will allow your agency to satisfy your data integration and transformation needs, while avoiding the need for a costly and sometimes lengthy software development effort to build the necessary data transformation capabilities from scratch. This helps ensure that precious agency business and IT resources are free to focus on other agency needs.

<sup>1</sup>[http://en.wikipedia.org/wiki/Data\\_integration](http://en.wikipedia.org/wiki/Data_integration)

<sup>2</sup><http://www.pilotfishtechnology.com/>

### III. Overview of PilotFish XCS eiPlatform

The XCS eiPlatform enterprise integration solution is a Java-based framework that leverages application server technology, web services and industry XML standards to enable agencies to deploy system and data interfaces more quickly and less expensively than through traditional methods. When combined with the XCS eiConsole, PilotFish's graphical integrated development environment (IDE), the agency has a comprehensive and powerful tool for enterprise integration.



Your agency can expect to achieve the following benefits from the XCS iePlatform:

- ◆ The XCS iePlatform allows your agency to rapidly stand-up data integration solutions, allowing you to make the most of your limited resources. Using the tool, agencies can focus more on the business information and less on programming and infrastructure,
- ◆ With training, the tool can empower your business staff to define and build the transformation rules that are at the heart of data integration. This allows your business resources to be more self-sufficient and reduce your dependency on IT resources,
- ◆ The XCS iePlatform will allow your agency to easily tackle those small, one-time, and oft-delayed data clean-up projects that are critical to ensuring that your mission-critical data remains accurate and reliable,
- ◆ Many state agencies are expected to adhere to one or more of the federal government's data standards, such as the National Information Exchange Model (NIEM).<sup>3</sup> The use of information exchange standards, such as NIEM, are growing and the iePlatform tool can help your agency easily achieve compliance without the overhead of a costly software development efforts,
- ◆ Finally, the tool provides a structured development framework and environment that will allow your technical resources to be more productive.

<sup>3</sup><https://www.niem.gov/Pages/default.aspx>

## IV. Implementation Models for Data Integration Services

Agencies have three options in implementing Data Integration Services. The choice of approach depends greatly on the size of your agency and the complexity of your agency's business requirements and your agency's existing systems.

- ◆ Use of the PilotFish solution through the centralized DAS/BEST Enterprise Data Integration Platform, housed at the state data center,
- ◆ Implementation of PilotFish by an agency as a local, agency-centric environment, and lastly
- ◆ Use of a hybrid (hub and spoke) model that relies on both the Enterprise and one or more local agency PilotFish platforms.

The DAS/BEST Data Services Division will be happy to consult with any agency that desires to learn more about how Data Integration Services and the PilotFish product can help you meet your agency's business needs.

## V. Description of Consultation Services

DAS/BEST Data Services provides basic consultation and coaching to agencies considering the use of the PilotFish product as well consultation concerning the implementation and usage of both the XCS eiConsole and the XCS eiPlatform. Our consultation services come in two forms:

- ◆ **Service Consultation** – provide information on the business and technical capabilities and proper usage at a conceptual level. Consultation can also include helping your agency through the planning process and to provide coaching, as needed, to help your project team over any trouble spots.
- ◆ **Technical Consultation** – provide guidance to the project team concerning the design, construction, testing and implementation of the product.

Consultation services are scheduled by appointment and are available during normal DAS/BEST business hours, Monday through Friday, between the hours of 9:00 am and 4:00 pm. There is no cost for basic consultation services and access to any consulting services is on a first come, first served basis and subject to the availability of our Data Services Division staff.

Agencies who require more substantive technical support can engage the services of a PilotFish Technical Consultant. These technical consultants are available to Executive Branch agencies through the use of the DAS Professional Services Contract.<sup>4</sup> PilotFish resources are provided through Tri-Com Consulting, a state consulting vendor.

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<sup>4</sup>[http://www.biznet.ct.gov/SCP\\_Documents/Results/4564/CA%2009ITZ0047%20w%20Supp%203.pdf](http://www.biznet.ct.gov/SCP_Documents/Results/4564/CA%2009ITZ0047%20w%20Supp%203.pdf)

## VI. Enterprise Data Integration Service Levels, Rates and Usage

DAS/BEST provides an enterprise implementation of the XCS eiPlatform for the deployment of agency-developed interfaces using the Enterprise Data Integration Platform, hosted at the state data center. Please refer to *Section VI.D* for additional detail on service-levels for the enterprise environment.

### A. Availability of the Service

This service became available to Executive Branch state agencies as of June 2012. This service will remain in place on a permanent basis. This service will not be discontinued without sufficient advanced notification to current customers.

Agencies that have made a decision to use the Enterprise Data Integration Service can refer to *Section VII* for additional information.

### B. DAS/BEST Service Rates

There is no cost for the use of the PilotFish product itself, regardless of the level of use by an agency. To make the most of the product, it's recommended that agencies invest in training. This will ensure that their business and technical staff will have the necessary knowledge and skills to use PilotFish to meet your business objectives. The cost for training can vary based on subject matter, class size and location.

There are no service fees for agencies that elect to host a PilotFish environment in their local agency data center.

The cost for use of the Enterprise Data Integration Service, hosted at the state data center, is nominal and will vary based on your implementation model and technical requirements. Estimates for the cost for your agency to use the Enterprise Data Integration Service can be provided by Data Services at the end of the consultation phase.

### C. Services Offered by PilotFish Technologies

Agencies choosing the use of PilotFish may elect to obtain additional services offered directly by PilotFish Technologies. These services include training as well as consultation and technical services. Agencies can obtain these services through the state's IT Professional Services master agreement.

Agencies can review the possible need for the use of those services offered by PilotFish Technologies during their consultation with Data Services.



#### **D. DAS/BEST Enterprise Data Integration Service Levels**

- ◆ The platform is housed in the state data center, which operates twenty-four hours a day, three hundred and sixty five days a year,
- ◆ The infrastructure and platform upon which the agency PilotFish environments run is monitored twenty-four hours a day, three hundred and sixty five days a year,
- ◆ Technical support for the infrastructure and platform is provided by skilled and experienced state technology professionals, under the direction and supervision of DAS/BEST,
- ◆ Each agency is provided its own unique PilotFish environment; you don't need to share your agency's workload with others,
- ◆ If needed, the PilotFish environment can be implemented as a high-availability service, to ensure that the service will remain continually available,
- ◆ The state data center and network infrastructure are highly secure, which provides the maximum level of security and protection over your agency's information,
- ◆ DAS/BEST provides deployment support for agencies releasing new transformation rules into the platform, eliminating the need for your agency to take on this responsibility,
- ◆ Issues impacting the availability of agency Data Integration environments are handled in accordance with existing DAS/BEST Incident and Problem Management standards, and
- ◆ Operational support for an individual agency's PilotFish environment, such as monitoring the success of data transformation activities that run after-hours can be negotiated with Data Services.

#### **E. Incident Reporting**

Once your agency's Data Integration solution has been implemented; agency customers can report any incidents or outages to the DAS/BEST Help Desk by phone by dialing (860) 622-2300(Option 9) or by email at [BEST.Helpdesk@ct.gov](mailto:BEST.Helpdesk@ct.gov).



## **F. Special Considerations**

- ◆ Business Recovery and Disaster Recovery of any interface(s) will be defined by the agency's business requirements, including recovery time objective (RTO) and recovery point objective (RPO). PilotFish natively supports transactional recovery in the event of failure.
- ◆ Agencies who desire to use the extension capabilities of PilotFish through the use of custom Java code must review their requirements with Data Services. Custom Java code will not be deployed on the Enterprise Platform without the prior approval of Data Services.
- ◆ DAS/BEST reserves the right to request that agencies present their implementation plans to the state's Technology Review Board.
- ◆ DAS/BEST plans to form a User Group for agency PilotFish customers. The goal of this User Group is to promote a greater awareness of the capabilities of the Data Integration Service, to foster knowledge transfer and skill building and for agencies to share their use of PilotFish with their peer agencies.
- ◆ PilotFish Technologies is developing a resources page for the State of Connecticut's exclusive use.

## **G. Conditions of Use**

- ◆ Agencies are not permitted to act as an official business reference for PilotFish Technologies. Any request for references are to be directed to the Office of the CIO.
- ◆ Agencies are expected to thoroughly test all transformation rules prior to the rules being turned over to DAS/BEST for deployment. DAS/BEST is not responsible for any adverse impact to agency or state data that may result from the deployment of any agency transformation rule into the Enterprise.
- ◆ Implementation of PilotFish maintenance upgrades are the responsibility of Data Services in consultation with each agency.
- ◆ Planned outages will conform to DAS/BEST standards unless otherwise requested by the agency.
- ◆ Agencies will be responsible for any fees or costs related to training or consulting services provided by PilotFish Technologies at the request of the agency.
- ◆ Agency staff will be expected to have the necessary knowledge, skills and experience to perform the design and development activities that supports the agency's use PilotFish. Unfortunately, DAS/BEST is not able to offer development services to agencies to support the agency's use of PilotFish.

## VII. How to obtain Enterprise Data Integration Services

### A. Customer Responsibilities

- ◆ Agencies interested in this service are asked to submit a Request for Consultation Service (RFS).<sup>6</sup> Agencies should complete the RFS in the manner found in the sample in *Figure 1*.

**Request for Consultation**

[Instructions for pasting into Impact forms from Microsoft documents](#)

\* indicates a required field

Requestor Information	Agency Information
*First: Jane	*Agency: Administrative Services ▼
*Last: Doe	*Address: 123 Easy Street
*Phone: 860-555-1212	*City: Hartford
Fax:	*Zip: 06106
*E-Mail: jane.doe@ct.gov	
<b>Is this request related to an active project</b>	
* <input type="radio"/> Yes <input checked="" type="radio"/> No	
* Service Area Enterprise Services ▼	* Consultation Type Enterprise Services ▼
<b>Request Description</b> <div style="border: 1px solid #ccc; padding: 5px; min-height: 40px;">                     My agency is requesting a consultation on the Data Integration service.                 </div>	

**Figure 1 – Sample RFS for Consultation**

- ◆ After the initial service consultation, your agency will make a determination on the use of this service. Agencies that elect to move forward will be working with the DAS/BEST Data Services Division on a series of next steps, identified below.
- ◆ Agencies that choose a self-hosted implementation model will receive instructions from DAS/BEST Data Service that will empower the agency to move forward on their own.
- ◆ For agencies that chose an enterprise or hi-bred implementation model, DAS/BEST Data Services will provide information to the agency on next steps that include:
  - Developing a project timeline or project plan that supports the agency's implementation of PilotFish.
  - Submission of the necessary Requests for Service (RFS) that will trigger the work needed to build the necessary PilotFish environments for the agency at that state data center.
  - Completing a Data Services Interface Requirements Document that supports the agency's intended use of PilotFish.

### **B. DAS/BEST Responsibilities**

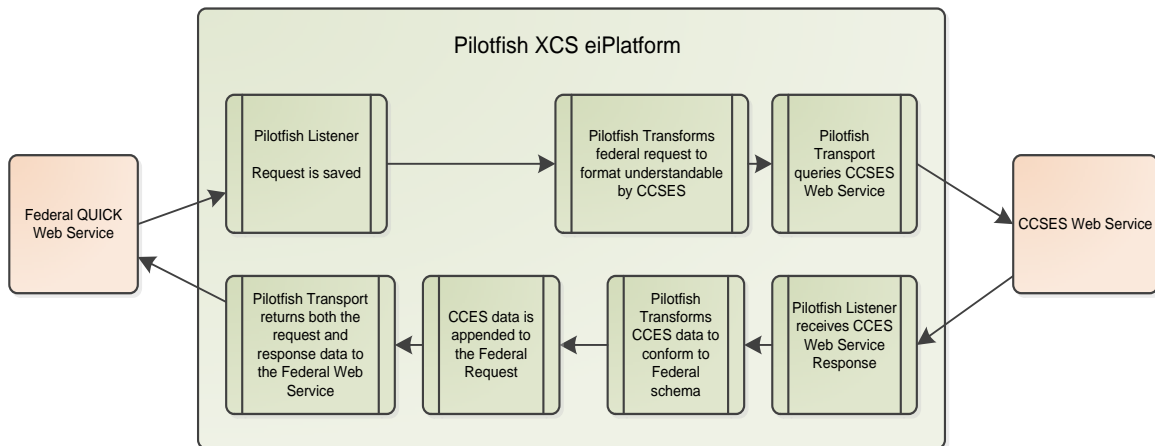
- ◆ Consult with the customer to guide them through the use of the service and to provide them with guidance on basic architecture and design options and methods.
- ◆ As needed, provide coaching and guidance to the agency.
- ◆ Guide the agency in the completion of the Data Services Interface Requirements Document.
- ◆ Include the Enterprise Data Integration platform in the DAS/BEST Change Management process. The DAS/BEST Change Management program is based on ITIL standards and is a proven method to help ensure the reliability and stability of the state's IT ecosystem.
- ◆ Work with the agency and DAS/BEST Service Divisions to determine that the required resources are available to fulfill the tasks as outlined in the project plan.
- ◆ Meet the service levels outlined in *Section VI.D*.

## VIII. Examples of Data Integration solutions using Pilotfish

### A. DSS - Federal State Case Registry (QUICK)

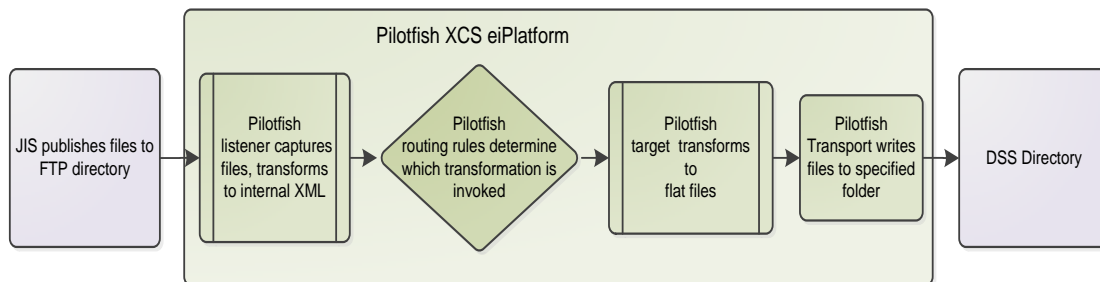
The Department of Social Services (DSS) has chosen PilotFish to implement an interface between the federal government’s Office of Child Support Enforcement’s “QUICK” System and a DSS in-house case management platform. This new interface allows the DSS to commence participation in a nationwide clearinghouse for child support case information.

To augment their interface, DSS implemented a set of custom web services that comply with federal standards for web services descriptions. The agency estimates that the implementation of the interface using PilotFish took about 50% less time over the approach that called for the a custom-developed .NET solution.



### B. DSS - Judicial State Registry

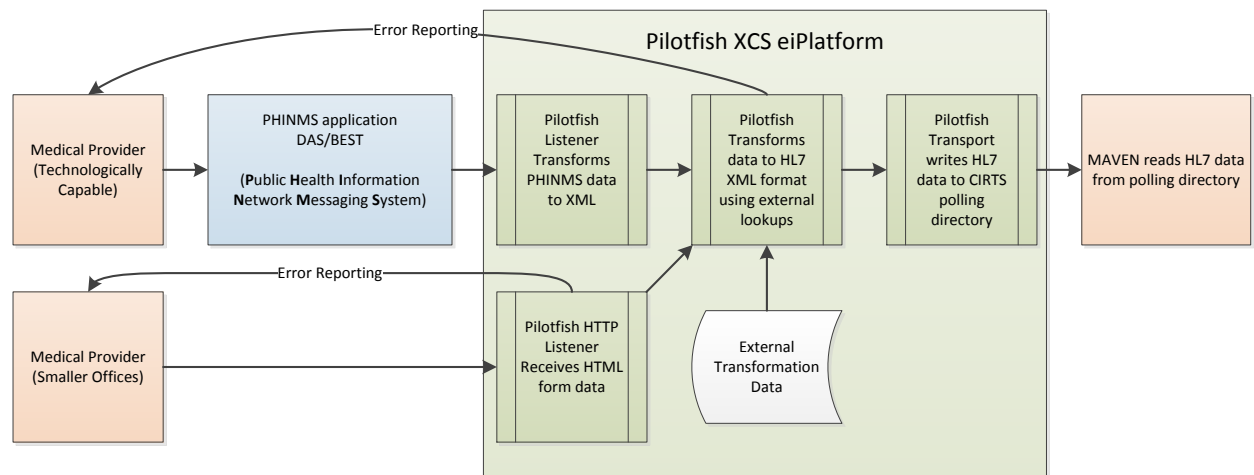
Using PilotFish software, DSS has implemented an interface to import XML files from the Judicial Branch to DSS. The data comes from the Judicial Branch as XML files and the PilotFish environment transforms them into flat files, which were then routed to different DSS services based on the data values found within those files.



### C. DPH – Immunization Providers

The federal government has created reporting requirements for immunization and disease reporting to which the state must comply. To satisfy this requirement, the Department of Public Health (DPH) must be able to receive data from various sources, including medical practices and centers, hospitals, clinics and other healthcare providers throughout the state. To accommodate variety of data sources, formats and methods by which these providers will be transmitting data, DPH chose PilotFish to meet their business requirements.

DPH has replaced the existing “Rhapsody” HL7 interface engine with Pilotfish and this new interface facilitates communication between the immunization providers and MAVEN, a critical DSS system, using HL7 the federal standard for transmitting health data. This interface will accept HL7 versions 2.3.1 and 2.5 immunization records from hundreds of healthcare providers statewide and will accommodate any communications protocol that the data is sent in.

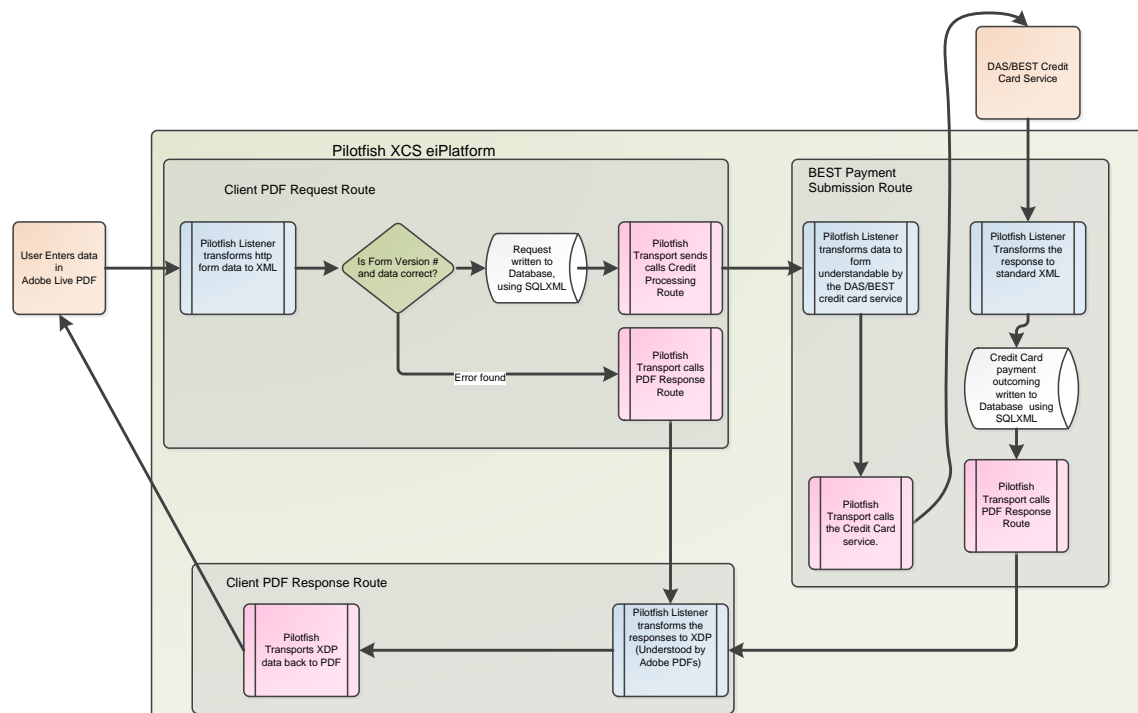


## D. DESPP – Online Service Request

The Department of Emergency Services and Public Protection (DESPP) is developing a web portal to electronically process requests for criminal history. This solution will request data, including credit card information collected via an online form. Payments will be electronically processed through a centralized payment service, and the collected information is securely transmitted to the state's highly secure criminal justice information systems environment.

The new effort was initiated in order to streamline the current process for state residents and to improve the user's experience, eliminate errors, delays and backlogs. PilotFish plays a key role in coordinating the transmission of data to the systems critical end points.

The prior systems required citizens to download, print out, complete, and mail a signed copy of the completed document to the DESPP headquarters in Middletown. Additionally, the sender had to remit the required payment along with the signed request form. Once the paperwork was received by DESPP, members of the background check unit were required to enter this information into a database and manually process the payment. If the information received by the requestor was incomplete, the request was returned with a note describing the error. This workflow was error-prone and inefficient which resulted in significant delays in processing requests.



## E. CoreCT – Data Movement Interface Replacement

Over the past years, the CoreCT team has developed over 300 individual file movement interfaces used to transmit data between the CoreCT system and other internal and external entities, including financial institutions such as Webster Bank and Bank of America. In order to promote consistency, maintainability, and visibility into these critical processes, CoreCT has begun to migrate these interfaces to the PilotFish eiPlatform.

The CoreCT team chose PilotFish to replace the existing functionality of their FileMover application. As is done today, scheduling software will be used to initiate the process. When initiated, a PilotFish-hosted interface will query an existing database table to acquire the list of file transmissions required. The interface will then execute these transmissions based on the information contained in the query results.

File transmissions are typically either simple network-based file moves, or FTP/FTPS/SFTP connections to external servers. Data may or may not require interface-specific XML schema driven data validation, PGP encryption/decryption, or other unique handling. The total effort estimated to replace the functionality of all 300+ file transmissions is less than 6 weeks.

